

REMARKS

By this Amendment, Claim 1 has been amended, to place this application in immediate condition for allowance.

In the outstanding Office Action, the Examiner has rejected Claim 1 under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 4,874,937 to Okamoto in view of U.S. Patent No. 4,314,761 to Raymond et al. In making this ground of rejection, the Examiner first makes reference to the invention disclosed by Okamoto as illustrated in Figures 4-6 including what the Examiner alleges to be a two dimensional mask consisting of an allegedly opaque film 41 formed on the upper surface of the rectangular prism 43 and wherein the two dimensional mask 41, 43 disposed between the CCD linear array sensor 45 and the sunbeam of the light source SB shown in Figure 6. However, the Examiner acknowledges that Okamoto fails to teach or suggest “the mask having a two dimensional surface pattern formed thereon by a prescribed pattern of frequencies, whereby light from said source travels through said mask and onto said detector, said surface pattern causing at least one of phase or frequency changes to occur ...”.

To cure this alleged deficiency, the Examiner points to the prior art acknowledged by Okamoto and illustrated in Figures 1-3 thereof. The Examiner alleges, with particular reference to Figure 3, that the prior art acknowledged by Okamoto includes a mask “considered to be a rectangular prism (31 of figure 3) having two surface opaque films (33, 35 of figure 3), wherein said surface opaque film mask (35 of figure 3) having a two-

dimensional surface pattern (figure 3) formed thereon by a prescribed pattern of frequencies (34, 38, 39 of figure 3 and col. 1, line 50 to col. 2, line 3) ...”.

Even in the face of these two separate teachings, the teachings of Okamoto and the teachings of the acknowledged prior art described in Okamoto, the Examiner acknowledges that these combined teachings still fall short of the claimed invention since they fail to teach or suggest a point light source. For this aspect, the Examiner relies upon the teachings of Reymond et al., with particular reference to the reference character S_1 .

Thus, in analyzing the ground of rejection, it is apparent that three separate prior art references have been combined together in an attempt to meet the terms of Claim 1. The Examiner has first taken the alleged invention of Okamoto as illustrated in Figures 4-6 and modified that invention in light of the acknowledged prior art of Okamoto to provide the pattern 34, 38, 39 shown in Figure 3 which is described by Okamoto as acknowledged prior art consisting of “A plurality of Gray-code patterns 34 are formed in opaque film 35 by means of etching. Each Gray-code pattern consists of a plurality of segments. ...”. Column 1, lines 50-53. It is noted that the patterns 34, 38 and 39 are not directly exposed to the source of light S_B (Figure 3) but, instead, are separated therefrom through the use of an opaque surface 33 and a one dimensional slot 32. Thus, the entirety of the patterns 34, 38 and 39 is not exposed to the source of light S_B at any given time. Similar structure is shown in the invention of Okamoto with reference to Figures 4-6 including the one dimensional slot 42 through the opaque surface 41 allowing light from the source S_B to impinge upon the active surface of the detector 45 after passing through a bandpass filter 44. Column 3, line 36 - column 4, line 22. Thus, neither the prior art

acknowledged by Okamoto nor the Okamoto invention teaches direct exposure of a surface pattern to a source of light. Additionally, neither Okamoto nor the acknowledged prior art disclosed in Okamoto teaches or suggests use of a point source of light in association therewith. This is essentially admitted by the Examiner who relies upon a third reference, the Reymond et al. patent, for this teaching.

It is respectfully submitted that this ground of rejection is untenable under Patent Law. Each of the teachings found in the Okamoto patent that are combined together fails to teach or suggest a point source of light. As such, the question must be asked as to where the Examiner has gone for the suggestion to modify those two teachings through the additional teaching of a point source of light found in the Reymond et al. reference. The only answer can possibly be that the suggestion for such a combination is applicants' own disclosure. Since the hindsight reconstruction of the prior art in reliance upon applicants' own disclosure is a practice forbidden in patent law, the ground of rejection should be withdrawn.

Moreover, since neither the Okamoto invention nor the prior art acknowledged in Okamoto teaches the use of a point source of light, Reymond et al., in fact, teach away from the teachings of the Okamoto invention and those of the admitted prior art disclosed by Okamoto. Where a prior art reference teaches away from the subject invention, that reference is an inappropriate reference to apply under 35 U.S.C. 103.

Although the ground of rejection is believed without basis, in order to expedite the prosecution of this patent application, independent Claim 1 has been amended to specify that the mask has a two dimensional surface pattern that is "entirely exposed to

said space.” Support for this recitation is clearly found in the drawings as filed with this application. For example, Figure 1 clearly shows the point source of radiation directly facing the mask identified by the reference indication “Mask.” This relationship is also shown in Figures 2 and 3.

This direct exposure of the surface of the mask to the point source of light is nowhere taught or suggested in the prior art applied in the outstanding Office Action. Thus, the alleged structure of the acknowledged prior art of Okamoto identified by reference numerals 34, 38 and 39 in Figure 3 is not exposed directly to the space where the source of light S_B is located. Rather, it is separated therefrom by a one dimensional slit 32. The phantom lines in Figure 3 make it clear that only a one dimensional line of the alleged mask of the acknowledged prior art of Okamoto is ever exposed to the source of light S_B at any given time. Thus, Claim 1 as amended patentably distinguishes from the prior art applied thereagainst in the outstanding Office Action.

Applicants acknowledge, with appreciation, the allowance of Claims 19 and 20. Applicants also acknowledge, with appreciation, the indication of the allowability of Claims 2-18. However, based upon the amendments to independent Claim 1 as set forth above and explained herein, it was not deemed necessary or appropriate to incorporate the limitations of any of the objected to dependent claims into independent Claim 1.

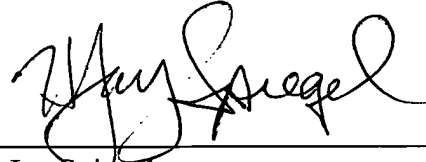
Accordingly, reconsideration and allowance of this application are respectfully solicited. If, for any reason, the Examiner believes that an interview with Applicants’ Attorney would be helpful in expediting the prosecution of this patent application, the

Examiner is respectfully requested to telephone Applicants' Attorney locally at (703) 619-0101 so that a discussion of any outstanding issues may be had.

Again, reconsideration and allowance of this application are respectfully solicited.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "H. Jay Spiegel", written over a horizontal line.

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